

RESPONSE TO COMMENTS
SUMMARIZED IN JUNE 6, 1995 LETTER

PRODUCT CATEGORIES

Comments: The United States Environmental Protection Agency (U.S. EPA) survey overstates the sales in tons of metal cleansers by almost eight times, as well as, the number of products that are included in this category.

There should be caution used in accepting the ranking criteria provided by the U.S. EPA without careful examination of the considerations upon which they were established.

Thousands of different products may fall into the "other" categories in the U.S. EPA survey. These "other" product categories are inappropriate for establishing Volatile Organic Compound (VOC) limits.

Other product categories such as "other adhesives," and "paint thinners" may consist of commercial-use products that are already subject to district rules or are under district jurisdiction.

Many of the product categories regulated under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) might be sold for both commercial and household use, and regulatory jurisdiction is unclear.

Some of the "other" groups such as "other insecticides," and "other miscellaneous FIFRA products" are estimated to contribute more VOCs per day than some specifically targeted products that make an extremely small contribution to the total VOC emissions.

Response: We agree that the U.S. EPA survey needs to be further evaluated and clarified. In order to do this, we will be working with an ad-hoc categories committee of the mid-term measures subgroup to evaluate the U.S. EPA survey. The goals of this committee are to review the products included in the different product categories, including the "other" product categories, and to establish who has the authority to regulate certain products. This effort will help us to evaluate the need for augmenting the U.S. EPA survey with an Air Resources Board (ARB) survey. Through this process we will also investigate how the U.S. EPA rankings were established. We used these rankings to initially evaluate and sort the product categories included in the U.S. EPA survey, to determine what products will be regulated.

Comment: Group III includes a number of product categories with such minimal emissions that regulating them would not be environmentally significant or cost effective. Only

product categories emitting more than a de minimus emission level of 0.7 tons per day should be considered for future regulations.

Response: We believe that it is too early in the regulatory process to eliminate any product categories based on a de minimus emission level.

Comment: The product category "carpet and tile adhesives," is already regulated as construction and panel adhesives by the ARB and the districts.

Response: Based on our initial review of this category, it does not appear that the product category, "carpet and tile adhesives," is already regulated by the ARB.

Comment: There are non-surveyed "commercial products" in the U.S. EPA inventory that might meet California's definition of consumer product (i.e., artificial fireplace logs and commercial explosives). These products should be considered for regulation because their inventories are larger than many of the 93 product categories chosen.

The ARB should further investigate whether each commercial products category in the U.S. EPA report is in the California inventory, has been regulated or is scheduled for regulation, and what percent VOC reductions have been required.

Response: We will be working with the ad hoc categories committee to resolve these issues.

Comment: The "automotive lubricants/miscellaneous household lubricants" and "automotive waxes, polishes and sealers" categories were considered for regulation during ARB's Phase II rule development, but were eliminated due to the complexity of the product performance requirements and the numerous product subcategories they represent.

Response: In order to meet the goals of the mid-term measures, we must consider all possible product categories that we have not already regulated.

Comment: The "residual insecticides" category is another name for the insecticide crawling bug category that is already regulated by the ARB. This category should be removed from the mid-term measures list.

Response: We have investigated this issue and found that the "residual insecticides" product category is another name for the insecticide crawling bug category that is already regulated by the ARB. Therefore, we will remove "residual insecticides" from the mid-term measures list.

Comment: Categories such as, "prescription pharmaceutical," "other over-the-counter drugs," and "disinfectants" are composed of products already regulated by other federal and state regulatory agencies. These products must meet strict safety and efficacy standards, and reformulation could jeopardize their ability to meet these requirements.

Response: We understand that some products are currently obligated to meet strict safety and efficacy standards. If any of these products are considered for the mid-term measures, we will take this into consideration.

Comment: The higher emitting product categories may consist of numerous small product categories that may have lower emissions than those categories dismissed by the ARB.

The ARB should determine if all the products included in the 93 product categories are "consumer products" under the California Clean Air Act, or if any of them are planned for regulation by other regulatory authorities such as the Department of Pesticide Regulation (DPR) or the districts.

Response: We will be working with the ad hoc categories committee to resolve these issues.

Comment: Products with VOC emissions having a down-the-drain or biodegradation fate should not be regulated.

Response: If any of these products are considered for the mid-term measures, we will take product fate into consideration.

Comment: The primary focus of the mid-term measures subgroup should be to identify what types of products are included in the numerous, vaguely defined product categories, and to determine the regulatory authority for these products (e.g., ARB, DPR or districts).

Response: We agree that the first task of the mid-term measures subgroup should be to assist us in clarifying the information in the U.S. EPA survey. Therefore, the ad-hoc categories committee was formed to work with us on these issues.

STATE IMPLEMENTATION PLAN/INVENTORY

Comment: The U.S. EPA report shows substantial emissions from commercial products. The ARB should review the U.S. EPA inventory to determine which commercial product categories warrant further regulation, and require that all districts implement these regulations.

Response: Districts have the primary authority to regulate stationary sources in California. Those districts not

in attainment for ozone have already extensively regulated the majority of their stationary sources through traditional VOC standards, "new source review," and other regulations. However, we will inform the districts if we identify any commercial products that warrant further regulation.

Comment: VOCs emitted from mobile sources and other combustion sources are understated.

Response: The ARB's emission inventory is continuously updated and improved to incorporate the best emission estimates available for sources of VOCs.

Comment: The ARB's estimate of total VOC emissions in California from consumer products appears to be 22 percent lower than the U.S. EPA estimate. This overestimates the contribution of certain consumer products to California's total VOC emissions from consumer products.

There seem to be wide discrepancies between the ARB and U.S. EPA estimates in percent emission reductions achievable from consumer products standards.

Response: We are working with the U.S. EPA as well as an ad hoc committee of the mid-term measures subgroup to determine what products are included in the U.S. EPA survey and how the products are categorized. This will allow us to determine how the U.S. EPA calculated VOC emissions and percent emission reductions, and to resolve any discrepancies between the U.S. EPA and ARB data.

Comment: Emissions should be quantified by actual use of products within non-attainment areas, rather than averaging sales totals and factoring in local population.

The ARB should use the VOC emissions data from the U.S. EPA consumer products survey.

Response: We will be working with industry representatives to determine the best way to estimate product sales and VOC emissions in California. We will also decide whether the U.S. EPA data are sufficient to develop the mid-term measures.

Comment: The ARB should identify and regulate "miscellaneous stationary source items" which comprise a large portion of the total stationary source emissions inventory, rather than focusing on consumer products.

Response: The "miscellaneous stationary source items" include many mobile and stationary sources that are already regulated by the ARB or the districts. In order to meet attainment for ozone throughout California, we

must look at other VOC sources, such as consumer products, for further reductions.

Comment: When the total amount of VOC emissions is considered, including VOCs from biogenic, mobile, stationary combustion, and all combustion mobile sources, the amount remaining from consumer evaporative products is less than three percent.

Response: According to our 1990 emissions inventory data, consumer products account for 6 percent (4 percent if biogenic sources are included) of the total VOC emissions in California. Consumer products also account for 15 percent of the total VOC emissions from stationary sources in California. However, as mobile source and other stationary source emissions continue to decline with planned controls, consumer products emissions will continue to increase. To attain the federal ozone standard, we must offset growth and further reduce VOC emissions by 30 to 80 percent. This will require additional reductions in VOC emissions from consumer products.

Comment: When developing regulations, the ARB should differentiate between requirements for the South Coast Air Basin and those of the rest of California.

Response: There are several reasons why we do not differentiate between requirements for the South Coast Air Basin and those of the rest of California. First, the regulations that are developed for the South Coast Air Basin assist other non-attainment areas to meet their ozone attainment goals. Also, these regulations assist areas throughout the State to achieve or maintain the State ozone standard required by the California Clean Air Act. Lastly, we always try to promote statewide consistency when developing regulations. We believe this makes it easier and less costly for industry to comply.

Comment: The Consumer Products Working Group should discuss and develop a plan for revising the SIP to address any shortfall in VOC reductions that may occur once regulations are issued.

Response: We believe it is premature to develop a plan to modify the SIP until it becomes apparent that the emission reductions are not achievable. In addition, such an effort would need to involve all interested parties affected by the SIP, not just the consumer products industry. At some point, we can consider the process and timing necessary to modify the SIP if the projected emission reductions do not appear feasible.

RELATIVE REACTIVITY

Comments: Relative reactivity needs to be implemented in all ozone abatement regulations. It should be done retroactively to adjust existing regulations so that they are actually abating ozone and not simply reducing levels of VOCs.

The ethanol exemption should be expanded to all consumer products using ethanol. All other substances used as solvents or propellants in consumer products, and which are as low or lower on the reactivity scale as ethanol, should also be granted an equal exemption.

Acetone should be exempted as a VOC. It is essential for the ARB to adopt all exemptions adopted by the U.S. EPA.

Economic burdens should be measured in terms of cost to reduce a unit of ozone. The costs incurred to reformulate laundry detergents to reduce the VOC content by 100 pounds, would produce emission reductions of only four pounds.

The low volatility organic compound and moderate volatility organic compound distinction incorporated into earlier consumer products regulations should be removed.

There needs to be consideration of probable emissions in those hours of the day in which sunlight and heat will cause ozone formation.

Biogenic VOCs should be accounted for in ozone modeling analyses and used as a baseline for assessing the effectiveness of ozone control strategies before such strategies are applied.

Ambient air measurements should be taken and used to evaluate attainment rather than emission estimates or air quality modeling analyses.

The reactivity subgroup should be involved in many scientific and technical issues such as air quality modeling, emissions inventory, and test methods.

Response: The reactivity subgroup of the Consumer Products Working Group will address these specific issues. We will be working with this subgroup to consider the use of reactivity factors in the mid-term measures. We note that we will be recommending to our Board that acetone be exempted from the consumer products definition for VOC at its September 28, 1995 hearing.

TECHNOLOGICAL AND COMMERCIAL FEASIBILITY

Comments: Any newly promulgated mid-term and long-term measures must be commercially and technologically feasible, and

should not impose disproportionate costs on the various sources of VOC emissions.

Many of the reductions required from consumer products are not achievable in the context of today's formulation technology.

Response: We are committed to developing regulations that are technologically and commercially feasible. We believe the goals in the SIP are achievable by considering a variety of approaches including traditional VOC limits, market incentives, reactivity adjustments, and consumer education. We will work closely with industry in the development of our mid-term measures to minimize the burden on the consumer products industry.

OTHER

Comment: The ARB should recruit specialized technical experts for product categories such as adhesives and lubricants.

Response: The ARB is always open to working with all interested parties in the development of our regulations. It is also our goal to include educational presentations by specialized technical experts at our Consumer Products Working Group and subgroup meetings.

Comment: October 1995 is too soon to begin the regulatory workshop process for the mid-term measures. This process should begin once all of the basic questions are answered that potentially affect all of the categories that are being considered for the mid-term measures.

Response: The workshop in October 1995 is important for meeting the June 1997 deadline for the mid-term measures hearing. There is a substantial amount of work ahead of us to meet this deadline. Extensive involvement with industry and the public is needed to develop mid-term measures that are effective and fair.